Abstract

In this work, an objective comparison between some common global appearance face recognition based methods (PCA, FLD, SVD, DCT, DWT and WPD) has been carried out when considering some natural effects that may decrease the performances. In particular, effects such as blur, motion, noise and their combination are taken into account. To evaluate the
performances, FEI database containing images corresponding to 200 individuals are used.

For each individual, 14 positions have been considered. The quality of face reconnaissance is measured using the well-known Equal Error Rate (EER) criteria. Interesting results are obtained highlighting the superiority, in some specific contexts, of some of the evaluated methods.

Reference

- LiuC. and WechslerH. Face recognition using Evolutionary pursuit. Appears in the fifth European conference on computer vision, ECCV'98, University of Freiburg, Germany, June 2-6 1998.
Effect of Noise, Blur and Motion on Global Appearance Face Recognition based Methods Performance


Index Terms

Computer Science Pattern Recognition

Key words

Face recognition PCA SVD

DCT
DWT

WPD

motion

blur and noise